

The Little Colorado - San Juan Watershed

This watershed is defined by the Little Colorado River drainage area from its headwaters to the Colorado River. The flow on the Little Colorado River is “interrupted” (stretches of perennial, intermittent, and ephemeral flow). Perennial flow is generally limited to headwater streams.

Land ownership is divided approximately as: 15% private land, 10% state land, 15% federal land, and 60% Tribal lands. This 26,794 square mile watershed is sparsely populated outside of Flagstaff, with 236,500 people (including Flagstaff). Land use is primarily open grazing, forestry, recreation, and mining. Land and resource use is restricted on four national monuments, four designated wilderness areas, and two national forests.

Elevations range from 12,600 feet (above sea level) at Humphrey’s Peak to 2,700 feet near the Colorado River; however, almost the entire watershed is above 5000 feet elevation (desert highlands flora and fauna), with coldwater aquatic communities where perennial waters exist.

The area includes horizontally stratified sedimentary rocks (e.g., sandstone and limestone) which have eroded to form canyon and plateaus. In a few areas, igneous rocks have deposited on sedimentary formations due to volcanic activity. Natural erosion can be easily increased by human activities in such locations.

The assessment – Assessments were completed for 35 stream reaches and 22 lakes in this watershed. Of the 473 stream miles assessed, zero miles were attaining all uses and 93 miles (nine reaches) were impaired or not attaining a use. Of the 4,866 lake acres assessed, none were assessed as attaining all uses and 3,560 acres (eight lakes) were assessed as impaired or not attaining a use. All other reaches and lakes assessed were inconclusive or attaining some uses.

A watershed assessment map follows on the next page, illustrating stream and lake assessments by category. The Little Colorado **monitoring table (Table 11)** following the map summarizes the water quality data used in the assessment. It is followed by the **assessment table (Table 12)**, which bridges current assessments with past assessments and impaired water identification. Important to note in this table are comments regarding previous 303(d) lists (what has been added and removed), category designations (1 through 5), references to potential actions by EPA, and status of TMDLs.

Detailed information on how to use these tables is found at the beginning of this chapter (p. IV-1). Assessment methods and criteria can be found in Chapter III.



Silver Creek, a tributary of the Little Colorado River, near Snowflake, Arizona.

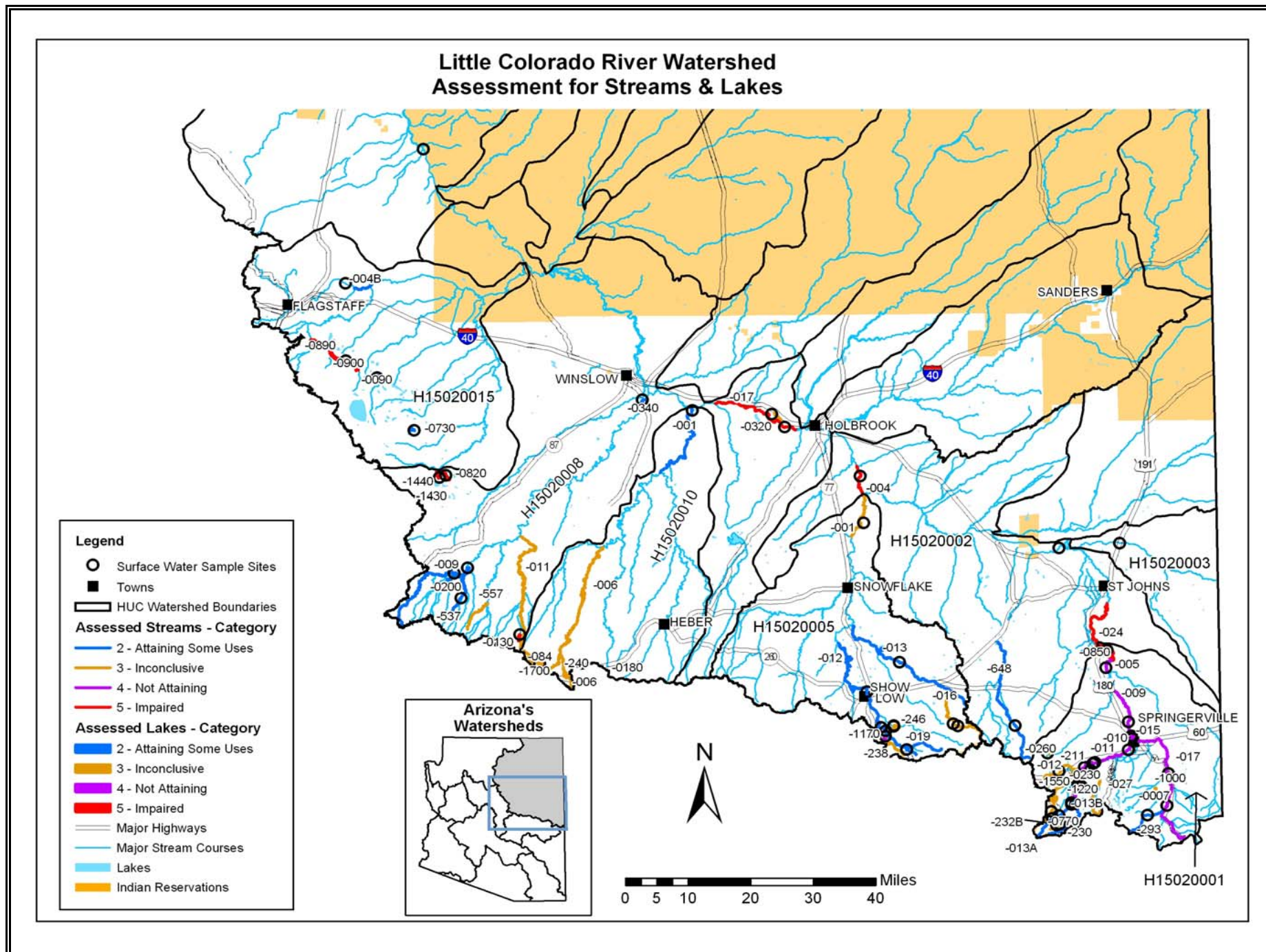


TABLE 11. LITTLE COLORADO - SAN JUAN WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
STREAM MONITORING DATA								
Barbershop Canyon Creek headwaters - East Clear Creek AZ15020008-537 A&Wc, FC, FBC, AgL	ADEQ Ambient Monitoring At Merrit Draw LCBRB003.84 100410	2000 - 1 full suite 2001 - 3 full suites	Dissolved oxygen mg/L	>7.0 (90% saturation) (A&Ww)	6.5 - 10.00 (88 - 97%)	1 of 4		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in final assessment. Lab reporting limits for copper were too high to use results for assessment.
	Summary Row A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining	2000-2001 4 samples	No exceedances					ADEQ collected 4 samples in 2000-2001. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameter: dissolved copper.
Billy Creek headwaters - Show Low Creek AZ15020005-019 A&Wc, FC, FBC, AgL	ADEQ Ambient Monitoring At Pinetop LCBIL003.86 100946	2000 - 1 full suite 2001 - 3 full suites	Escherichia coli CFU/100 ml	235 (FBC)	<2 - 420	1 of 4		Lab reporting limits for copper were too high to use results for assessment.
			Turbidity (former standard) NTU	10 (A&Wc)	5 - 16	1 of 4		
	ADEQ Ambient Monitoring Above Porter Creek LCBII000.03 100947	2000 - 1 full suite 2001 - 3 full suites	Turbidity (former standard) NTU	10 (A&Wc)	4 - 28	2 of 4		
	Summary Row A&Wc Inconclusive FC Attaining FBC Inconclusive AgL Attaining	2000-2001 8 samples 4 sampling events	Escherichia coli CFU/100ml	235 (FBC)	<2 - 420	1 of 4 events (in 2000)	Inconclusive	ADEQ collected 8 samples at 2 sites in 2000-2001. Asessed as "attaining some uses" and placed on the Planning List due to: 1. Escherichia coli exceedance, 2. Missing core parameter: dissolved copper, and 3. Former turbidity standard exceedances. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
			Turbidity (former standard) NTU	10 (A&Wc)	4 - 28	3 of 8	Inconclusive	
Brown Creek headwaters - Silver Creek AZ15020005-016 A&Wc, FC, FBC (tributary rule)	ADEQ Ambient Monitoring Outside of exclosures LCRBRO009.99 101241	2001 -1 full suite	No exceedances					Lab reporting limits for copper were too high to use results for assessment.
	ADEQ Ambient Monitoring Below Brown Spring- within cattle exclosure LCBRO0010.4 101242	2001 - 1 full suite	No exceedances					

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	2001	No exceedances					Insufficient monitoring data to assess.
	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	2 samples 1 sampling event						
Chevelon Creek Black Canyon - Little Colorado River AZ15020010-001 A&Wc, FC, FBC, AgL, AgI	ADEQ Ambient Monitoring Below diversion dam near Winslow LCCHC000.69 100341	2001 - 1 full suite 2002 - 3 full suites	Turbidity (former standard) NTU	10 (A&Wc)	12 - 34	4 of 4		
	Summary Row	2001 - 2002	Turbidity (former standard) NTU	10 (A&Wc)	12 - 34	4 of 4	Inconclusive	ADEQ collected 4 samples in 2001- 2002. Assessed as "attaining some uses" and placed on the Planning List due to exceedances of the former turbidity standard. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
	A&Wc Inconclusive FC Attaining FBC Attaining AgI Attaining AgL Attaining	4 sampling events						
Colter Creek headwaters - Nutrioso Creek AZ15020001-293 A&Wc, FC, FBC, AgL	ADEQ Ambient Monitoring Near Nutrioso LCCHC001.94 100935	2001 - 1 full suite 2002 - 3 full suites	No exceedances					Lab reporting limits for copper were too high to use results for assessment.
	Summary Row	2001 -2002	No exceedances					ADEQ collected 4 samples in 2001-2002. Assessed as "attaining some uses" and placed on the Planning list due to missing core parameter: dissolved copper.
	A&Wc Inconclusive FC Attaining FBC Attaining AgI Attaining AgL Attaining	4 sampling events						
East Clear Creek headwaters - Yeager Canyon AZ15020008-009 A&Wc, FC, FBC, AgL, AgI	ADEQ Ambient Monitoring Above Yeager Canyon LCECL007.86 100537	2000 - 1 full suite 2001 - 3 full suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.4 - 10.5 (72 - 91%)	2 of 4		Lab reporting limits for copper were too high to use results for assessment.
	Summary Row	2000 - 2001	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.4 - 10.5 (72 - 91%)	2 of 4	Inconclusive	ADEQ collected 4 samples in 2000-2001. Assessed as "attaining some uses" and placed on the Planning List due to low dissolved oxygen and missing core parameter: dissolved copper.
	A&Wc Inconclusive FC Attaining FBC Attaining AgI Attaining AgL Attaining	4 samples 4 sample events						
Fish Creek headwaters - Little Colorado River AZ15020001-211 A&Wc, FC, FBC, AgL	ADEQ Ambient Monitoring upstream FS Road #118 LCFIS001.97 101244	2001 - 1 full suite	Mercury (dissolved) µg/L	0.01 (A&Wc chronic)	0.8	1 of 1		Lab reporting limits for copper samples were too high to use results for assessment.
				0.6 (FC)		1 of 1		Dissolved mercury data compared to total mercury standard.
	Summary Row	2001	Mercury (dissolved) µg/L	0.01 (A&Wc chronic)	0.8	1 of 1 event	Inconclusive	Insufficient monitoring data to assess (only 1 sample).
	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	1 sampling event		0.6 (FC)		1 of 1	Inconclusive	Placed on the Planning List due to mercury exceedance.
Hall Creek headwaters - Little Colorado River AZ15020001-012 A&Wc, FC, FBC, AgI, AgL	ADEQ Ambient Monitoring Below wilderness area and above Highway 273 LCHAL007.00 101263	2001 - 1 full suite	Dissolved oxygen mg/L	>7.0 (A&Wc)	6.5	1 of 1		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in final assessment.

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive AgL Inconclusive	2000-2001 1 sampling event	No exceedances					Insufficient monitoring data to assess (only 1 sample).
Lee Valley Creek Lee Valley Reservoir - East Fork of Little Colorado River AZ15020001-232B A&Wc, FBC, FC, AGL	ADEQ Ambient Monitoring Above wilderness boundary LCLVL00.85 101243	2001 - 1 full suite	No exceedances					
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	2001 1 sampling event	No exceedances					Insufficient monitoring data to assess (only 1 sample).
Little Colorado River West Fork Little Colorado - Water Canyon Creek AZ15020001-011 A&Wc, FC, FBC, AgL, AgL	Town of Eager "Big Ditch" Project Site 1 - At South Fork of LCR LCLCR174.81	2001 - 3 field 2002 - 12 field	Turbidity (former standard) NTU	10 (A&Wc)	3 - 18	2 of 15		Lab reporting limits for dissolved copper and cadmium were too high to use results for assessment.
	Town of Eager "Big Ditch" Project Site 2 - At golf course LCLCR174.26	2001 - 3 field 2002 - 12 field	Turbidity (former standard) NTU	10 (A&Wc)	5 - 29	3 of 15		
	ADEQ Ambient Monitoring Below South Fork of LCR LCLCR173.85 100581	2000 - 1 full suite 2001 - 3 full suites	Turbidity (former standard) NTU	10 (A&Wc)	6 - 21	1 of 4		
	ADEQ Ambient Monitoring Above South Fork of LCR LCLCR173.84 100580	1998 - 1 partial suite	No exceedances					
	Town of Eager "Big Ditch" Project Site 3 - At State Route 60 Port of Entry LCLCR172.98	2001 - 3 field 2002 - 12 field	Turbidity (former standard) NTU	10 (A&Wc)	9 - 33	12 of 15		
			Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.4 - 12.4	1 of 15		
	Summary Row A&Wc Not attaining FC Attaining FBC Attaining AgL Attaining AgL Attaining	1998 - 2002 50 samples 20 sampling events	Turbidity (former standard) NTU	10 (A&Wc)	3 - 21	18 of 50	Not attaining (see comment)	The Town of Eager collected 45 field samples, and ADEQ collected 5 samples from 1998-2002. A turbidity TMDL was completed for the Little Colorado River in 2002.
			Dissolved oxygen mg/L	> 7.0 (A&Wc)	6.4 - 12.4	1 of 50	Attaining	

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Little Colorado River Nutriosio Creek - Carnero Wash AZ15020001-009 A&Wc, FC, FBC, Agl, AgL	ADEQ Fixed Station Network Below Springerville WWTP LCLCR172.60 100331	1999 - 3 full + 1 partial suite 2000 - 4 full suites 2001 - 4 full suites 2002 - 1 full suite	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	260	1 of 12		
			Turbidity (former standard) NTU	10 (A&Wc)	5 - 24	9 of 12		
	Summary Row A&Wc Not attaining FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	1999-2000 13 sampling events	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	260	1 of 12 events (in 2000)	Inconclusive	ADEQ collected 13 samples in 1999-2000. A turbidity TMDL was completed for the Little Colorado River in 2002. Assessed as "not attaining" due to exceedances of the former turbidity standard and placed on the Planning List for turbidity TMDL follow-up monitoring. Also placed on the Planning List due to <i>Escherichia coli</i> exceedance.
			Turbidity (former standard) NTU	10 (A&Wc)	5 - 24	9 of 12	Not attaining	
Little Colorado River unnamed reach (15020001-021) to Lyman Lake AZ15020001-005 A&Wc, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring Above Lyman Lake LCLCR161.69 101174	2000 - 1 full suite 2001 - 3 full suites	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 354	1 of 3		
			Turbidity (former standard) NTU	10 (A&Wc)	18 - 481	3 of 3		
	Summary Row A&Wc Not attaining FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	2000-2001 4 sampling events	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 354	1 of 3 events (in 2001)	Inconclusive	ADEQ collected 4 samples in 2000-2001. A turbidity TMDL was completed for the Little Colorado River in 2002. Assessed as "not attaining" due to exceedances of the former turbidity standard and placed on the Planning List for <i>Escherichia coli</i> exceedance and TMDL follow-up monitoring.
			Turbidity (former standard) NTU	10 (A&Wc)	18 - 481	3 of 3	Not attaining	
Little Colorado River HUC 15020001 boundary - unnamed tributary (15020002- 025) AZ15020002-024 A&Wc, FC, FBC, DWS, Agl, AgL	AGFD Routine Monitoring At Weinema Bridge LCLCR158.36	1999 - 1 partial suite 2000 - 1 partial suite	No exceedances					
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive DWS Inconclusive Agl Inconclusive AgL Inconclusive	2000 2 sampling events	No exceedances					Insufficient monitoring data to assess.
Little Colorado River Silver Creek - Carr Wash AZ15020002-004 A&Wc, FC, FBC, DWS, Agl, AgL	USGS & ADEQ Fixed Station Near Woodruff LCLCR120.11 100334	1998 - 1 partial suite 1999 - 1 full + 3 partial suites 2000 - 3 full + 1 partial suite 2001 - 4 full suites 2002 - 1 full + 1 partial suite	Arsenic (total) µg/L	50 (DWS, FBC)	<10 - 67	1 of 11		
			Barium (total) µg/L	2000 (DWS)	180 - 7,700	2 of 10		
			Beryllium (total) µg/L	4 (DWS)	<0.5 - 43	2 of 12		
			Chromium (total) µg/L	100 (DWS)	<10 - 120	1 of 12		
			Dissolved oxygen mg/L	>7 (90% saturation) (A&Wc)	6.3 - 10.2 (81 - 105%)	1 of 11		

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	
			<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 57,000	2 of 9 (2 in last 3-year period)		
			Lead (total) µg/L	15 (DWS, FBC)	<5 - 290	3 of 12		
				100 (AgL)		2 of 12		
			Manganese (total) µg/L	980 (DWS)	<50 - 9,800	2 of 12		
			Mercury (total) µg/L	0.6 (FC)	<0.5 - 0.97	1 of 12		
			Nickel (total) µg/L	140 (DWS)	<100 - 210	1 of 10		
			Suspended sediment conc. (SSC) mg/L	80 (geometric mean) (A&Wc)	248	1 of 1 sample		Insufficient data to calculate a geometric mean. Need a minimum of 4 samples. Not included in the final assessment.
			Turbidity (former standard) NTU	10 (A&Wc)	54 - >1000	8 of 8		
	Summary Row A&Wc Impaired FC Attaining FBC Impaired DWS Inconclusive AgL Attaining AgL Attaining	1998-2002 15 samples 15 sampling events	Arsenic (total) µg/L	50 (DWS, FBC)	<10 - 67	1 of 11	Attaining	ADEQ and USGS collected 19 samples in 1998-2002. Assessed as "impaired" due to <i>Escherichia coli</i> exceedances. EPA assessed this reach as impaired due to sediment, using exceedances of the former turbidity standard as evidence of a narrative bottom deposit violation. Placed on the Planning List due to lead exceedances.
			Barium (total) µg/L	2000 (DWS)	180 - 7,700	2 of 10	Attaining	
			Beryllium (total) µg/L	4 (DWS)	<0.5 - 43	2 of 12	Attaining	
			Chromium (total) µg/L	100 (DWS)	<10 - 120	1 of 12	Attaining	
			Dissolved oxygen mg/L	> 7 (90% saturation) (A&Wc)	6.3 - 10.2 (81 - 105%)	1 of 11	Attaining	
			<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 57,000	2 of 9 events (in 2000 and 2001)	Impaired	
			Lead (total) µg/L	15 (DWS, FBC)	<5 - 290	3 of 12	Inconclusive	
				100 (AgL)	<5 - 371	2 of 12	Attaining	
			Manganese (total) µg/L	980 (DWS)	<50 - 9,800	2 of 12	Attaining	
			Mercury (total) µg/L	0.6 (FC)	<0.5 - 0.97	1 of 12	Attaining	

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
			Nickel (total) µg/L	140 (DWS)	<100 - 210	1 of 10	Attaining	
			Turbidity (former standard) NTU	10 (A&Wc)	54 - >1000	8 of 8	Impaired - evidence of narrative violation (see comment above right)	
Little Colorado River Zion Reservoir - Concho Creek AZ15020002-016 A&Wc, FBC, FC, DWS, Agl, Agl	USGS Fixed Station Near St. Johns #09386100 LCLCR143.39 101459	1999 - 5 SSC events 2000 - 9 SSC events 2001 - 5 SSC events 2002 - 3 SSC events	Suspended sediment concentration (SSC) mg/L	80 (geometric mean) (A&Wc)	8 - 2180	Geo means: 1999 = 163 2000 = 37 2001 = 25		Maximum base flow was calculated to be 17 cfs based on 30 years of flow data. Insufficient SSC data to calculate a geometric mean in 1998 or 2002.
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive DWS Inconclusive Agl Inconclusive Agl Inconclusive	1999-2002 39 samples 22 sampling events	Suspended sediment concentration (SSC) mg/L	80 (geometric mean) (A&Wc)	8 - 2180	1 of 3 annual geo. means	Inconclusive	USGS collected 39 SSC samples during 22 sampling events in 1999-2002. Assessed as "inconclusive" and placed on the Planning List due to SSC exceedance and missing core parameters: all except SSC.
Little Colorado River Porter Tank Draw - McDonalds Wash AZ15020008-017 A&Ww, FBC, FC, DWS, Agl, Agl	USGS Fixed Station Near Joseph City #09397300 LCLCR108.60 101480	1998 - 8 SSC events 1999 - 6 SSC events 2000 - 3 SSC events 2001 - 8 SSC events 2002 - 2 SSC events	Suspended sediment conc. (SSC) mg/L	80 (geometric mean) (A&Wc)	146 - 515,000	Geo means: 1998 = 49,029 1999 = 22,906 2001 = 47,248		Maximum base flow was calculated to be 2020 cfs based on 30 years of flow data. Insufficient monitoring data to calculate a geometric mean in 2000 or 2002.
	Summary Row A&Ww Impaired FC Inconclusive FBC Inconclusive DWS Inconclusive Agl Inconclusive Agl Inconclusive	1998-2002 93 samples 27 sampling events	Suspended sediment concentration (SSC) mg/L	80 (geometric mean) (A&Wc)	146 - 515,000	3 of 3 annual geo. means	Impaired	USGS collected 93 SSC samples during 27 sampling events in 1998-2002. Reach was on the 2002 303(d) List due to past copper and silver exceedances (no current data). Assessed as "impaired" due to past copper and silver exceedances and current SSC exceedances. Placed on the Planning List due to missing core parameters: all missing except SSC.
Little Colorado River, <u>East Fork</u> headwaters - Hall Creek AZ15020001-230 A&Wc, FBC, FC, AGL	ADEQ Ambient Monitoring Near Greer LCELR000.92 100948	2000 - 1 full suite 2001 - 3 full suites	No exceedances					Lab reporting limits for dissolved copper and cadmium were too high to use results for assessment.
	Summary Row A&Wc Inconclusive FC Attaining FBC Attaining Agl Attaining	2000-2001 4 sampling events	No exceedances					ADEQ collected 4 samples in 2000-2001. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: dissolved metals (copper and cadmium).

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Little Colorado River, <u>South Fork</u> headwaters - Little Colorado R. AZ15020001-027 A&Wc, FC, FBC, AgL	ADEQ Biocriteria Program At S. Fork Campground LCSLR001.29 100644	1998 - 1 partial suite	No exceedances					Lab reporting limits for dissolved copper were too high to use results for assessment.
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	1998 1 sampling event	No exceedances					Insufficient monitoring data to assess.
Little Colorado River, <u>West Fork</u> headwaters - Gov't Springs AZ15020001-013A A&Wc, FC, FBC Unique Water	ADEQ Biocriteria Program Mount Baldy Wilderness LCWLR004.09 100694	1998 - 1 partial suite	No exceedances					Lab reporting limits for dissolved copper and cadmium were too high to use results for assessment.
	ADEQ Ambient Monitoring Below Sheep's Crossing LCWLR003.30 100945	2000 - 1 partial suite 2001 - 2 full suites 2002 - 1 full suite	No exceedances					
	ADEQ Biocriteria Program Above Government Springs LCWLR001.08 100695	1998 - 1 partial suite	No exceedances					
	Summary Row A&Wc Inconclusive FC Attaining FBC Attaining	1998-2002 6 samples 5 sampling event	No exceedances					ADEQ collected 6 samples at 3 sites in 1998-2002. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: dissolved metals (copper and cadmium).
Little Colorado River, <u>West Fork</u> Gov't Springs - Little Colorado R. AZ15020001-013B A&Wc, FC, FBC, AgL	ADEQ Fixed Station Network At Government Springs LCWLR000.78 100328	1999 - 4 full suites 2000 - 4 full suites 2001 - 4 full suites 2002 - 1 full suite	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.3 - 10.7 (82 - 116%)	2 of 11		Low dissolved oxygen due to naturally occurring ground water upwelling (at spring), and not anthropogenic causes. Not included in final assessment. Lab reporting limits for 12 other copper and cadmium samples were too high to use results for assessments.
			Copper (dissolved) µg/L	varies by hardness (A&Wc chronic)	<10 - 13	1 of 1		
				varies by hardness (A&Wc acute)	<10 - 13	1 of 1		
	Summary Row A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining	1999-2002 13 sampling events	Copper (dissolved) µg/L	varies by hardness (A&Wc chronic)	<10 - 13	1 of 1 event	Inconclusive	ADEQ collected 13 samples in 1999-2002. Assessed as "attaining some uses" and placed on the Planning List due to copper exceedance and missing core parameters: dissolved metals (copper and cadmium).
				varies by hardness (A&Wc acute)	<10 - 13	1 of 1 event (in 2002)	Inconclusive	
Mineral Creek headwaters - Concho Creek AZ15020002-648 A&Wc, FC, FBC, AgL, AgL	ADEQ Ambient Monitoring Above Forest Road #404 LCMIN014.01 100593	2000 - 1 full suite 2001 - 3 full suites	Dissolved oxygen mg/L	>7.0 (90% saturation) (A&Wc)	6.4 - 9.9 (86 - 91%)	1 of 4		Lab reporting limits for dissolved copper were too high to use results for assessment.
	Summary Row A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining AgL Attaining	2000-2001 4 samples	Dissolved oxygen mg/L	> 7.0 (90% saturation) A&Wc	6.4 - 9.9 (86 - 91%)	1 of 4	Inconclusive	ADEQ collected 4 samples in 2000-2001. Assessed as "attaining some uses" and placed on the Planning List due to low dissolved oxygen and missing core parameter: dissolved copper.

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			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Nutrioso Creek headwaters - Picnic Creek AZ15020001-017 A&Wc, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring Near Nutrioso, Arizona LCNUT012.17 100936	2000 - 1 full suite 2001 - 3 full suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.1 - 9.2 (64 - 91%)	2 of 4		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in the final assessment.
			Turbidity (former standard) NTU	10 (A&Wc)	9 - 34	1 of 4		
	Summary Row A&Wc Not attaining FC Attaining FBC Attaining Agl Attaining AgL Attaining	2000-2001 4 samples	Turbidity (former standard) NTU	10 (A&Wc)	9 - 34	1 of 4	Inconclusive (Not attaining)	ADEQ collected 4 samples in 2000-2001. A turbidity TMDL was approved by EPA in 2000. Assessed as "not attaining" and placed on the Planning List for TMDL follow-up monitoring.
Porter Creek headwaters - Show Low Creek AZ15020005-246 A&Wc, FC, FBC, AgL	ADEQ Ambient Monitoring Above Scott Reservoir LCPRT001.23 101415	2002 - 1 full suite	Turbidity (former standard) NTU	10 (A&Wc)	14	1 of 1		Lab reporting limits for copper samples were too high to use results for assessment.
	AGFD Ambient Monitoring Above Scott Reservoir LCPRT001.17	1998 - 1 field, nutrients	No exceedances					
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	1998-2002 2 sampling events	Turbidity (former standard) NTU	10 (A&Wc)	14	1 of 1	Inconclusive (see comment)	Insufficient monitoring data to assess. Placed on the Planning List due to former turbidity standard exceedance. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
Rio de Flag Flagstaff WWTP - San Francisco Wash AZ15020015-004B A&Wedw, PBC	ADEQ Ambient Monitoring At Doney Park, Flagstaff LCRDF002.97 10127	2000 - 1 full suite 2001 - 3 full suites	Turbidity (former standard) NTU	50 (A&Wedw)	4 - 71	1 of 4		
	Summary Row A&Wedw Inconclusive PBC Attaining	2000 - 2001 4 sampling events	Turbidity (former standard) NTU	50 (A&Wedw)	4 - 71	1 of 4	Inconclusive (see comment)	ADEQ collected 4 samples in 2000-2001. Assessed as "attaining some uses" and placed on the Planning List due to exceedance of former turbidity standard. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
Show Low Creek headwaters - Linden Wash AZ15020005-012 A&Wc, FC, FBC, Agl, AgL	AGFD Routine Monitoring Above Show Low Lake LCSHL017.18	1998 - 1 field, nutrients	No exceedances					
	ADEQ Ambient Monitoring Near Show Low, AZ LCSHL011.06 100340	2000 - 1 full suite 2001 - 3 full suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.0 - 8.7 (73 - 110%)	1 of 4		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in the final assessment.
			Turbidity (former standard) NTU	10 (A&Wc)	15 - 58	3 of 3		
	AGFD Routine Monitoring Above Fools Hollow Lake LCSHL010.47	1998 - 1 field, nutrients	No exceedances					

TABLE 11. LITTLE COLORADO - SAN JUAN WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&Wc Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining	1998 - 2001 6 samples 5 sampling events	Turbidity (former standard) NTU	10 (A&Wc)	15 - 58	3 of 5	Inconclusive (see comment)	AGFD and ADEQ collected 6 samples at 3 sites in 1998-2001. Assessed as "attaining some uses" and placed on the Planning List due to exceedance of the former turbidity standard. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
Silver Creek headwaters - Show Low Creek AZ15020005-013 A&Wc, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring Below AGFD hatchery LCSIL028.19 101125	2000 - 1 full suite 2001 - 3 full suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.5 - 10.0 (79 - 121%)	1 of 4		Lab reporting limits for dissolved copper were too high to use results for assessment.
			Turbidity (former standard) NTU	10 (A&Wc)	8 - 19.4	1 of 4		
	Summary Row A&Wc Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining	2000 - 2001 4 sampling events	Dissolved oxygen mg/L	> 7.0 (90% saturation) A&Wc)	6.5 - 10.0 (70 - 121%)	1 of 4	Inconclusive	ADEQ collected 4 samples in 2000-2001. Assessed as "attaining some uses" and placed on the Planning List due to low dissolved oxygen, a missing core parameter (dissolved copper), and an exceedance of the former turbidity standard. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
			Turbidity (former standard) NTU	10 (A&Wc)	8 - 19.4	1 of 4	Inconclusive (see comment)	
Silver Creek Seven-Mile Draw - Little Colorado River AZ15020005-001 A&Wc, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring Near Snowflake LCSIL004.78 100337	2002 - 1 full suite	Turbidity (former standard) NTU	10 (A&Wc)	136	1 of 1		
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive	2002 1 sampling event	Turbidity (former standard) NTU	10 (A&Wc)	136	1 of 1	Inconclusive (see comment)	Insufficient monitoring data to assess. Placed on the Planning List due to former turbidity standard exceedances. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
LAKE MONITORING DATA								
Ashurst Lake AZL15020015-0090 A&Wc, FC, FBC, Agl, AgL	ADEQ Lakes Program LCASH-A (at dam) 100973	2000 - 1 full + 1 partial suite 2001 - 2 partial suites	Turbidity (former standard) NTU	10 (A&Wc)	114 - 120	3 of 3		Lab reporting limits for copper were too high to use results for assessment.
	ADEQ Lakes Program LCASH-B (mid lake) 101294	2001 - 1 full suite	Turbidity (former standard) NTU	10 (A&Wc)	116	1 of 1		
	ADEQ Lakes Program LCASH-BR (boat ramp) 101327	2001 - 1 <i>Escherichia coli</i>	No exceedances					

TABLE 11. LITTLE COLORADO - SAN JUAN WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&Wc Inconclusive FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	2000-2001 6 samples 4 sampling events	Turbidity (former standard) NTU	10 (A&Wc)	114 - 120	4 of 4	Inconclusive (see comment)	ADEQ collected 6 samples in 2000-2001. Assessed as "attaining some uses" and placed on the Planning List due to: 1. Former turbidity standard exceedances. The causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed. 2. Missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).
Bear Canyon Lake AZ15020008-0130 A&Wc, FC, FBC, Agl, AgL	ADEQ Lakes Program LCBCL-A (deepest) 100969	2000 - 1 full suite 2001 - 3 full suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.6 - 8.0 (79 - 85%)	1 of 4		Lab detection limits for dissolved metals (cadmium, copper, and zinc) were too high to use results for assessments.
			pH SU	6.5 - 9.0 (A&Wc, FBC, Agl, AgL)	5.8 - 6.8	3 of 4		
			Selenium µg/L	2.0 (A&Wc chronic)	<2 - 3	1 of 4		
	ADEQ Lakes Program LCBCL-B (mid lake) 100970	2000 - 1 partial suite	Dissolved oxygen mg/L	> 7 (90% saturation) (A&Wc)	6.7 (80%)	1 of 1		
			pH SU	6.5 - 9.0 (A&Wc, FBC, Agl, AgL)	6.1	1 of 1		
	ADEQ Lakes Program LCBCL-BR (boat ramp) 100970	2001 - 1 <i>Escherichia coli</i>	No exceedances					
	Summary Row A&Wc Impaired FC Attaining FBC Impaired Agl Impaired AgL Impaired	2000 - 2001 6 samples 4 sampling events	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.6 - 8.0 (79 - 85%)	2 of 5	Inconclusive	ADEQ collected 6 samples at 3 sites in 2000 - 2001. EPA assessed this lake as "impaired" due to pH exceedances. Placed on the Planning List due to low dissolved oxygen, selenium exceedances, and missing core parameters: <i>Escherichia coli</i> and dissolved metals (copper, cadmium, and zinc).
			pH SU	6.5 - 9.0 (A&Wc, FBC, Agl, AgL)	5.8 - 6.8	4 of 5	Inconclusive	
			Selenium µg/L	2.0 (A&Wc chronic)	<2 - 3	1 of 4 events	Inconclusive	
Blue Ridge Reservoir AZL15020008-0200 A&Wc, FC, FBC, Agl, AgL	ADEQ Lakes Program LCBRR-A (deepest) 100974	2000 - 1 partial suite 2001 - 1 full + 2 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.7 - 11.0 (73 - 121%)	1 of 3		Lab reporting limits for dissolved metals (cadmium, copper, and zinc) were too high to use results for assessment.
	ADEQ Lakes Program LCBRR-C 101293	2001 - 1 partial suite	No exceedances					
	Summary Row A&Wc Inconclusive FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	2000 - 2001 5 samples 4 sampling events	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.7 - 11.0 (73 - 121%)	1 of 3	Inconclusive	ADEQ collected 5 samples at 2 sites in 2000 - 2001. Assessed as "attaining some uses" and placed on the Planning List due to low dissolved oxygen and missing core parameters: <i>Escherichia coli</i> and dissolved metals (copper, cadmium, and zinc).
Bunch Reservoir AZL15020001-0230 A&Wc, FC, FBC, Agl, AgL	AGFD Ambient Monitoring LCBUN - MID LAKE	2001 - 3 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.6 - 8.2 (66 - 99%)	2 of 3		

TABLE 11. LITTLE COLORADO - SAN JUAN WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive	2001 3 sampling events	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.6 - 8.2 (66 - 90%)	2 of 3	Inconclusive	AGFD collected 3 samples in 2001. Assessed as "inconclusive" and placed on the Planning List due to low dissolved oxygen and missing core parameters: turbidity, <i>Escherichia coli</i> , total boron, dissolved metals (copper, cadmium, and zinc), and total metals (mercury and lead).
Carnero Lake AZL15020001-0260 A&Wc, FC, FBC, AgL	AGFD Ambient Monitoring LCCAR-MID LAKE	2001 - 3 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	3.9 - 7.5 (55 - 97%)	1 of 3		
			pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	8.3 - 9.9	2 of 3		
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	2001 3 sampling events	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	3.9 - 7.5 (55 - 97%)	1 of 3	Inconclusive	AGFD collected 3 samples in 2001. Assessed as "inconclusive" and placed on the Planning List due to low dissolved oxygen, high pH, and missing core parameters: turbidity, <i>Escherichia coli</i> , dissolved metals (copper, cadmium, and zinc), and total metals (mercury and lead).
			pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	8.3 - 9.9	2 of 3	Inconclusive	
Cholla Lake AZL15020008-0320 A&Ww, FC, FBC	AGFD Ambient Monitoring LCCCHO - MID LAKE	1999 - 3 partial suites 2001 - 1 partial suite	No exceedances					Lab reporting limits for mercury were too high to use results for assessment.
	AGFD Ambient Monitoring Warmwater inflow LCCCHO - INFLOW	1999 - 3 partial suites 2001 - 1 partial suite	No exceedances					
	Summary Row A&Ww Inconclusive FC Inconclusive FBC Inconclusive	1999-2001 8 samples 4 sampling events	No exceedances					AGFD collected 8 samples in 1999-2001. Assessed as "inconclusive" and placed on the Planning List due to a fish kill in 2002 and missing core parameters: turbidity, <i>Escherichia coli</i> , total mercury, and dissolved metals (copper, cadmium, and zinc).
Clear Creek Reservoir AZL15020008-0340 A&Wc, FC, FBC, DWS, Agl, AgL	AGFD Ambient Monitoring Above Forest Road #99 LCCCR - 1	1999 - 3 partial suites	No exceedances					
	AGFD Ambient Monitoring Dam Site LCCCR - DAM SITE	1999 - 2 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.3 - 7.6 (79 - 99%)	1 of 2		
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive DWS Inconclusive Agl Inconclusive AgL Attaining	1999 5 samples 3 sampling events	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.3 - 7.6	1 of 5	Inconclusive	AGFD collected 5 samples at 2 sites in 1999. Assessed as "attaining some uses" and placed on the Planning List due to one low dissolved oxygen result and missing core parameters: turbidity, <i>Escherichia coli</i> , total fluoride, total boron, dissolved metals (copper, cadmium, and zinc), and total mercury.
Kinnikinnick Lake AZL15020015-0730 A&Wc, FC, FBC, AgL	ADEQ Lakes Program LCKIN - A (deepest) 100971	2000 - 1 partial suite	Turbidity (former standard) NTU	10 (A&Wc)	66 - 71	5 of 5		Lab reporting limits for dissolved cadmium and copper were too high to use results for assessment.
		2001 - 2 full + 1 partial suites	Selenium µg/L	2.0 (A&Wc chronic)	<2 - 3	1 of 4		
	ADEQ Lakes Program LCKIN - B (mid lake) 100972	2000 - 1 partial suite 2001 - 1 partial suite	Turbidity (former standard) NTU	10 (A&Wc)	60 - 69	2 of 2		
	ADEQ Lakes Program LCKIN - BR (boat ramp) 100972	2001 - 1 <i>Escherichia coli</i>	No exceedances					

TABLE 11. LITTLE COLORADO - SAN JUAN WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	2000 - 2002	Turbidity (former standard) NTU	10 (A&Wc)	60 - 71	7 of 7	Inconclusive	ADEQ collected 8 samples at 3 sites in 2000 - 2002. Assessed as "attaining some uses" and placed on the Planning List due to: 1. Selenium exceedances. 2. Missing core parameters: dissolved metals (copper, cadmium, and zinc) and <i>Escherichia coli</i> . 3. Former turbidity standard exceedances. The causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed.
	A&Wc Inconclusive FC Attaining FBC Inconclusive AgL Attaining	8 samples 4 sampling events	Selenium µg/L	2 (A&Wc chronic)	<2 - 3	1 of 4 events	Inconclusive	
Lake Mary – (Upper) AZL15020015-0900 A&Wc, FC, FBC, DWS, AgL	ADEQ Lakes Program LCMAU - A (deepest) 100029	2002 - 1 partial suite	Turbidity (former standard) NTU	10 (A&Wc)	70	1 of 1		Lab reporting limits for dissolved cadmium and copper were too high to use results for assessment. All samples collected on the same date.
	ADEQ Lakes Program LCMAU - B (mid lake) 101312	2002 - 1 partial suite	Turbidity (former standard) NTU	10 (A&Wc)	67	1 of 1		
	ADEQ Lakes Program LCMAU - C 101314	2002 - 1 partial suite	Turbidity (former standard) NTU	10 (A&Wc)	69	1 of 1		
	Summary Row A&Wc Inconclusive FC Impaired* FBC Inconclusive DWS Inconclusive AgL Inconclusive	2002 3 samples 1 sampling event	Turbidity (former standard) NTU	10 A&Wc	67 - 70	3 of 3 samples (1 of 1 event)	Inconclusive (see comment)	*Assessed as "impaired" due to mercury in fish tissue. EPA placed this reach on the 2002 303(d) List because mercury in fish tissue led to a fish consumption advisory in 2002. Once listed, the lake cannot be delisted until a TMDL is complete or there are sufficient data collected to indicate that mercury in fish tissue is no longer a concern (fish consumption advisory is removed). Also on the Planning List due to: 1. Former turbidity standard exceedances. The causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed. 2. Insufficient monitoring data.
Lee Valley Reservoir AZL15020001-0770 A&Wc, FC, FBC, Agl, AgL	AGFD Ambient Monitoring LCLEE	1998 - 3 partial suites	No exceedances					Lab reporting limits for dissolved cadmium and copper were too high to use results for assessment.
	ADEQ Lakes Program LCLEE - A (deepest) 101356	2001 - 1 partial suite 2002 - 2 partial suites	No exceedances					
	ADEQ Lakes Program LCLEE - SH (shoreline) 101357	2002 - 2 <i>Escherichia coli</i>	No exceedances					
	Summary Row A&Wc Inconclusive FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	1998 - 2002 8 samples 6 sampling events	No exceedances					ADEQ and AGFD collected 8 samples in 1998 - 2002. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium and copper).
Long Lake (Lower) AZL15020008-0820 A&Wc, FC, FBC, Agl, AgL	AGFD Ambient Monitoring North end LCLLL - North	1998 - 3 partial suites	No exceedances					
	AGFD Ambient Monitoring South Cove LCLLL - South	1998 - 3 partial suites 2001 - 1 partial suite	No exceedances					

TABLE 11. LITTLE COLORADO - SAN JUAN WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row	1998 - 2001	No exceedances					AGFD collected 7 samples in 1998 - 2001. EPA assessed this lake as "impaired" due to mercury in fish tissue. Fish consumption advisory issued in 2003.
	A&Wc Inconclusive FC Impaired FBC Inconclusive Agl Inconclusive AgL Inconclusive	7 samples 3 sampling events						Placed on the Planning List due to: 1. Insufficient water column monitoring, 2. Missing core parameters: turbidity, <i>Escherichia coli</i> , total boron, total metals (mercury, manganese, copper, and lead), and dissolved metals (copper, cadmium, and zinc).
Lyman Lake AZL15020001-0850 A&Wc, FC, FBC, Agl, AgL	AGFD Ambient Monitoring LCLYM - A (dam site)	1998 - 1 partial suite	No exceedances					
	Summary Row	1997-1998	No exceedances					EPA assessed this lake as "impaired" due to mercury in fish tissue. Fish consumption advisory issued in 2002.
	A&Wc Inconclusive FC Impaired FBC Inconclusive Agl Inconclusive AgL Inconclusive	1 sampling event						Placed on the Planning List due to missing core parameters: turbidity, field pH, <i>Escherichia coli</i> , dissolved metals (copper, cadmium, and zinc), and total metals (mercury, copper, and lead).
Nelson Reservoir AZL15020001-1000 A&Wc FC, FBC, Agl, AgL	AGFD Ambient Monitoring LCNEL - DAM SITE	1998 - 1 partial suite	No exceedances					
	Summary Row	1998	No exceedances					Insufficient monitoring data to assess.
	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive	1 sampling event						
Rainbow Lake AZL15020005-1170 A&Wc, FC, FBC, Agl, AgL	ADEQ Lakes Program LCRAI - A (deepest) 100069	2002 - 1 full suite	No exceedances					
	ADEQ Lakes Program LCRAI - B (mid lake) 100070	2002 - 1 partial suite	No exceedances					
	ADEQ Lakes Program LCRAI - BR (boad ramp) 101402	2002 - 1 <i>Escherichia coli</i>	No exceedances					
	Summary Row	2002	No exceedances					Nutrient TMDL completed in 2000. This lake will remain "not attaining" until there are sufficient data to indicate that dissolved oxygen, pH, and nutrients are supporting designated uses.
	A&Wc Not attaining FC Inconclusive FBC Not attaining Agl Not attaining AgL Not attaining	3 samples 1 sampling event						
River Reservoir AZL15020001-1220 A&Wc, FC, FBC, Agl, AgL	AGFD Ambient Monitoring LCRIV-MID (mid lake)	2001 - 3 partial suites	No exceedances					
	Summary Row	2001	No exceedances					AGFD collected 3 samples in 2001. Assessed as "inconclusive" and placed on the Planning List due to missing core parameters: turbidity, <i>Escherichia coli</i> , total boron, total metals (mercury and lead), and dissolved metals (copper, cadmium and zinc).
	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive	3 sampling events						

TABLE 11. LITTLE COLORADO - SAN JUAN WATERSHED -- 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEAR SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCE OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD DESIGNATED USE	RANGE OF RESULTS	FREQUENCY EXCEEDED	DESIGNATED USE SUPPORT	COMMENTS
Soldiers Annex Lake AZL15020008-1430 A&Wc FC, FBC, Agl, AgL	AGFD Ambient Monitoring LCNEL - DAM SITE	2001 - 1 partial suite	No exceedances					
	Summary Row A&Wc Inconclusive FC Impaired FBC Inconclusive Agl Inconclusive AgL Inconclusive	2001 1 sampling event	No exceedances					EPA assessed this lake as "impaired" for mercury in fish tissue. Fish consumption advisory issued in 2003. Placed on the Planning List due to insufficient water column monitoring.
Soldiers Lake AZL15020008-1440 A&Wc, FC, FBC, Agl, AgL	ADEQ Priority Pollutant Program – fish tissue	Data not shown No water quality data						
	Summary Row A&Wc Inconclusive FC Impaired FBC Inconclusive Agl Inconclusive AgL Inconclusive							EPA assessed this lake as "impaired" for mercury in fish tissue. Fish consumption advisory issued in 2003. Placed on the Planning List due to insufficient water column monitoring.
Tunnel Reservoir AZL15020001-1550 A&Wc FC, FBC, Agl, AgL	AGFD Ambient Monitoring LCNEL - MID LAKE	2001 - 3 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	4 - 8.1 (56 - 97%)	1 of 3		
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive	2001 3 sampling events	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	4 - 8.1 (56 - 97%)	1 of 3	Inconclusive	AGFD collected 3 samples in 2001. Assessed as "inconclusive" and placed on the Planning List due to low dissolved oxygen and missing core parameters: turbidity, <i>Escherichia coli</i> , total boron, total metals (mercury, manganese, and lead), and dissolved metals (copper, cadmium, and zinc).
Woods Canyon Lake AZL15020010-1700 A&Wc, FC, FBC, DWS, Agl, AgL	ADEQ Lakes Program LCWCL - A (deepest) 100092	2000 - 1 partial suite 2001 - 2 full + 1 partial suite	No exceedances					
	ADEQ Lakes Program LCWCL - B (mid lake) 10093	2000 - 1 full suite 2001 - 2 full suites	No exceedances					
	ADEQ Lakes Program LCWCL - BR (boat ramp) 101324	2001 - 1 <i>Escherichia coli</i>	No exceedances					
	Summary Row A&Wc Inconclusive FC Attaining FBC Inconclusive DWS Attaining Agl Attaining AgL Attaining	2000 - 2001 8 samples 4 sampling events	No exceedances					ADEQ collected 8 samples at 3 sites in 2001-2002. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).

TABLE 12. LITTLE COLORADO-SAN JUAN WATERSHED — ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
LITTLE COLORADO-SAN JUAN WATERSHED – STREAM ASSESSMENTS				
Barbershop Canyon Creek headwaters - East Clear Creek 10 miles AZ15020008-537	A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameter</u> : dissolved copper.		
Billy Creek headwaters - Show Low Creek 19 miles AZ15020005-019	A&Wc Inconclusive FC Attaining FBC Inconclusive AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to: 1. <u>Escherichia coli</u> exceedance (1 of 4 sampling events). 2. Former <u>turbidity</u> standard exceedances (3 of 8 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring. 3. <u>Missing core parameter</u> : dissolved copper.		
Brown Creek headwaters - Silver Creek 15 miles AZ15020005-016	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Category 3 — Inconclusive	On the Planning List due to insufficient monitoring data to assess (only 2 samples).		
Buck Springs Canyon Creek headwaters - Leonard Canyon 7 miles AZ15020008-557	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List. No current data. Added in 2002 due to: 1. <u>Turbidity</u> exceedance (1 of 1 sample). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring. 2. <u>Low pH</u> (1 of 1 sample). 3. <u>Missing core parameters</u> .		
Chevelon Creek headwaters - West Chevelon Creek 32 miles AZ15020010-006	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List. No current data. Added in 2002 due to: 1. Low <u>dissolved oxygen</u> . 2. <u>Missing core parameters</u> .		
Chevelon Creek Black Canyon - Little Colorado River 19 miles AZ15020010-001	A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to former <u>turbidity</u> standard exceedances (4 of 4 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Colter Creek headwaters - Nutrioso Creek 9 miles AZ15020001-293	A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameter</u> : dissolved copper.		
East Clear Creek headwaters - Yeager Canyon 38 miles AZ15020008-009	A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to: 1. Low <u>dissolved oxygen</u> (2 of 4 samples). 2. <u>Missing core parameter</u> : dissolved copper.		
Fish Creek headwaters - Little Colorado River 9 miles AZ15020001-211	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List due to: 1. Insufficient monitoring data to assess (only 1 sample). 2. <u>Mercury</u> exceedance (1 of 1 sample).		

TABLE 12. LITTLE COLORADO-SAN JUAN WATERSHED — ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Hall Creek headwaters - Little Colorado River 14 miles AZ15020001-012	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List due to insufficient monitoring data to assess (only 1 sample).		
Lee Valley Creek Lee Valley Reservoir - East Fork Little Colorado River 3 miles AZ15020001-232B	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive Category 3 -- Inconclusive	On the Planning List due to insufficient monitoring data to assess (only 1 sample).		
Little Colorado River West Fork Little Colorado - Water Canyon Creek 20 miles AZ15020001-011	A&Wc Not attaining FC Attaining FBC Attaining Agl Attaining AgL Attaining Category 4A -- Not attaining	On the Planning List for: 1. <u>Turbidity</u> TMDL follow-up monitoring. Turbidity still exceeding former standard in 18 of 50 samples. Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed. 2. <u>Missing core parameters</u> : dissolved metals (copper and cadmium).		A <u>turbidity</u> TMDL was approved by EPA in 2002 for the two reaches immediately downstream. Implementation of strategies identified in that TMDL should also bring this reach into compliance with its standards. Therefore, assessed as "not attaining" and placed on the Planning List for TMDL follow-up monitoring.
Little Colorado River Water Canyon Creek - Nutrioso Creek 4 miles AZ15020001-010	A&Wc Not attaining FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 4A — Not attaining	On the Planning List. <u>No current data</u> . Added in 2002 for <u>turbidity</u> TMDL follow-up monitoring (turbidity exceedances then in 5 of 6 samples). Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed.		A <u>turbidity</u> TMDL was approved by EPA in 2002. Placed on the Planning List in 2002 for TMDL follow-up monitoring.
Little Colorado River Nutrioso Creek - Carrero Wash 12 miles AZ15020001-009	A&Wc Not attaining FC Attaining FBC Inconclusive Agl Attaining AgL Attaining Category 4A -- Not attaining	On the Planning List for: 1. <u>Escherichia coli</u> exceedance (1 of 12 sampling events, occurred in 2000). 2. <u>Turbidity</u> TMDL follow-up monitoring. Former turbidity standard exceeded in 9 of 12 samples. Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed.		A <u>turbidity</u> TMDL was approved by EPA in 2002. Placed on the Planning List for TMDL follow-up monitoring.
Little Colorado River unnamed tributary 15020001-021 to Lyman Lake 3 miles AZ15020001-005	A&Wc Not attaining FC Attaining FBC Inconclusive Agl Attaining AgL Attaining Category 4A -- Not attaining	On the Planning List due to: 1. <u>Escherichia coli</u> exceedance (1 of 3 sampling events). 2. <u>Turbidity</u> TMDL follow up monitoring. Former turbidity standard exceeded in 3 of 3 samples. Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed.		A <u>turbidity</u> TMDL was approved by EPA in 2002 for two reaches only 3.2 miles upstream (15020001-010 and -009). Implementation of strategies identified in that TMDL should also bring this reach into compliance with its standards. Therefore, assessed as "not attaining" and placed on the Planning List for TMDL follow-up monitoring.
Little Colorado River HUC 15020001 boundary - unnamed tributary 15020002-025 14 miles AZ15020002-024	A&Wc Inconclusive FC Inconclusive FBC Inconclusive DWS Inconclusive Agl Inconclusive AgL Inconclusive Category 3 – Inconclusive	On the Planning List due to insufficient monitoring data to assess (only 2 samples).		
Little Colorado River Silver Creek - Carr Wash 6 miles AZ15020002-004	A&Wc Impaired FC Attaining FBC Impaired DWS Inconclusive Agl Attaining AgL Attaining Category 5 – Impaired	On the Planning List due to <u>lead</u> exceedances (3 of 12 samples).	Add <u>Escherichia coli</u> to the 303(d) List due to exceedances in 2 of 9 sampling events. Sediment added to the 2004 303(d) List by EPA, using exceedances of the former turbidity standard (8 of 8 samples) as evidence of a narrative bottom deposit violation.	

TABLE 12. LITTLE COLORADO-SAN JUAN WATERSHED — ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Little Colorado River Zion Reservoir - Concho Creek 7 miles AZ15020002-016	A&Wc Inconclusive FC Inconclusive FBC Inconclusive DWS Inconclusive Agl Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List due to: 1. <u>Suspended sediment concentration</u> (SSC) geometric mean exceedance. 2. <u>Missing core parameters</u> (only SSC data were collected).		
Little Colorado River Porter Tank - McDonalds Wash 17 miles AZ15020008-017	A&Ww Impaired FC Inconclusive FBC Inconclusive DWS Inconclusive Agl Inconclusive AgL Inconclusive Category 5 -- Impaired	On the Planning List due to: 1. <u>Missing core parameters</u> (only SSC data was collected).	On the 303(d) List (since 1992) due to <u>copper and silver</u> exceedances. ADEQ initiated a silver and copper TMDL investigation in 2002. Add suspended sediment concentration to the 303(d) List due to 1 of 3 annual geo. mean exceedances.	
Little Colorado River, <u>East Fork</u> headwaters - Hall Creek 11 miles AZ15020001-230	A&Wc Inconclusive FC Attaining FBC Attaining Agl Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : dissolved metals (copper and cadmium).		
Little Colorado River, <u>South Fork</u> headwaters - Little Colorado River 12 miles AZ15020001-027	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive Category 3 -- Inconclusive	On the Planning List due to insufficient monitoring data to assess (only 1 sample).		
Little Colorado River, <u>West Fork</u> headwaters - Government Springs 8 miles AZ15020001-013A Unique Water	A&Wc Inconclusive FC Attaining FBC Attaining Category 2 — Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : dissolved metals (copper and cadmium).		
Little Colorado River, <u>West Fork</u> Government Springs - Little Colorado River 1 mile AZ15020001-013B	A&Wc Inconclusive FC Attaining FBC Attaining Agl Attaining Category 2 -- Attaining Some Uses	On the Planning List due to: 1. <u>Acute and chronic copper</u> exceedance (1 of 1 sampling event). 2. <u>Missing core parameters</u> : dissolved metals (copper and cadmium).		
Mineral Creek headwaters - Concho Creek 26 miles AZ15020002-648	A&Wc Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to: 1. <u>Low dissolved oxygen</u> (1 of 4 samples). 2. <u>Missing core parameter</u> : dissolved copper.		
Nutrios Creek headwaters - Picnic Creek 27 miles AZ15020001-017	A&Wc Not attaining FC Attaining FBC Attaining Agl Attaining AgL Attaining Category 4A -- Not attaining	On the Planning List for <u>turbidity</u> TMDL follow-up monitoring. Turbidity exceeded the former standard in 1 of 4 samples. Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed.		A <u>turbidity</u> TMDL was approved by EPA in 2000. Added to the Planning List in 2002 for TMDL follow-up monitoring.
Nutrios Creek Picnic Creek - Little Colorado River 4 miles AZ15020001-015	A&Wc Not attaining FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 4A -- Not attaining	On the Planning List for: 1. <u>Turbidity</u> TMDL follow-up monitoring. Turbidity and suspended sediment concentration (SSC) monitoring will be scheduled during the next monitoring cycle for this watershed. 2. <u>Insufficient monitoring</u> (no current monitoring data).		A <u>turbidity</u> TMDL was approved by EPA in 2000. Added to the Planning List in 2002 for TMDL follow-up monitoring.

TABLE 12. LITTLE COLORADO-SAN JUAN WATERSHED — ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Porter Creek headwaters - Show Low Creek 4 miles AZ15020005-246	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List due to: 1. <u>Insufficient monitoring</u> data to assess (only 2 samples). 2. Former turbidity standard exceedance (1 of 1 sample). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Rio de Flag Flagstaff WWTP - San Francisco Wash 23 miles AZ15020015-004B	A&Wedw Inconclusive PBC Attaining Category 2 -- Attaining Some Uses	On the Planning List due to former <u>turbidity</u> standard exceedance (1 of 4 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Show Low Creek headwaters - Linden Wash 41 miles AZ15020005-012	A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to former <u>turbidity</u> standard exceedances (3 of 5 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Silver Creek headwaters - Show Low Creek 34 miles AZ15020005-013	A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to: 1. Low <u>dissolved oxygen</u> (1 of 4 samples). 2. <u>Missing core parameter</u> : dissolved copper. 3. Former turbidity standard exceedance (1 of 4 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Silver Creek Seven-Mile Draw - Little Colorado River 9 miles AZ15020005-001	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List due to: 1. Insufficient monitoring data to assess (only 1 sample). 2. Exceedance of the former <u>turbidity</u> standard (1 of 1 sample). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Walnut Creek Pine Lake - Rainbow Lake 9 miles AZ15020005-238	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	No current data. Added to the Planning List in 2002 due to missing core parameters.		
Willow Creek headwaters - East Clear Creek 32 miles AZ15020008-011	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	No current data. Added to the Planning List in 2002 due to missing core parameters.		
Willow Springs Canyon Creek headwaters - Chevelon Creek 9 miles AZ15020010-240 (previously listed as Willow Spring Creek)	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	No current monitoring data. Added to the Planning List in 2002 due to missing core parameters.		
Woods Canyon Creek headwaters - Chevelon Creek 13 miles AZ15020010-084	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 -- Inconclusive	No current monitoring data. Added to the Planning List in 2002 due to low <u>dissolved oxygen</u> (1 of 2 samples).		

TABLE 12. LITTLE COLORADO-SAN JUAN WATERSHED — ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE						
SURFACE WATER DESCRIPTION		2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS		2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
LITTLE COLORADO-SAN JUAN WATERSHED – LAKE ASSESSMENTS						
Ashurst Lake 201 acres AZL15020015-0090		A&Wc Inconclusive FC Attaining FBC Inconclusive Agl Attaining AgL Attaining Category 2 – Attaining Some Uses Trophic Status – Eutrophic	On the Planning List due to: 1. Missing core parameters: <i>Escherichia coli</i> and dissolved metals (copper, cadmium, and zinc). 2. Former turbidity standard exceedances (4 of 4 samples). Causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed.			
Bear Canyon Lake 55 acres AZL15020008-0130		A&Wc Impaired FC Attaining FBC Impaired Agl Impaired AgL Impaired Category 5 – Impaired Trophic Status – Mesotrophic	On the Planning List due to: 1. Low dissolved oxygen (2 of 5 samples). 2. Chronic selenium exceedance (1 of 4 sampling events). 3. Missing core parameters: <i>Escherichia coli</i> and dissolved metals (copper, cadmium, and zinc).		pH added to the 2004 303(d) List by EPA (4 of 5 exceedances).	
Black Canyon Lake 37 acres AZ15020010-0180		A&Wc Inconclusive FC Inconclusive FBC Inconclusive DWS Inconclusive Agl Inconclusive AgL Inconclusive Category 3 – Inconclusive Trophic Status not calculated	On the Planning List due to: 1. A fish kill in 2002 related to the Rodeo-Chediski Fire. This may be evidence of narrative standards violations. Monitoring is needed to determine long-term negative impacts from the fire. 2. No current monitoring data.			
Blue Ridge Reservoir 293 acres AZL15020008-0200		A&Wc Inconclusive FC Attaining FBC Inconclusive Agl Attaining AgL Attaining Category 2 -- Attaining Some Uses Trophic Status – Mesotrophic	On the Planning List due to: 1. Low dissolved oxygen (1 of 3 samples). 2. Missing core parameters: <i>Escherichia coli</i> and dissolved metals (copper, cadmium, and zinc).			
Bunch Reservoir 64 acres AZL15020001-0230		A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 3 — Inconclusive Trophic Status not calculated	On the Planning List due to: 1. Low dissolved oxygen (2 of 3 samples). 2. Missing core parameters: <i>Escherichia coli</i> , dissolved metals (copper, cadmium, and zinc), total boron, total metals (mercury and lead), and turbidity.			
Carnero Lake 67 acres AZL15020001-0260		A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive Category 3 — Inconclusive Trophic Status not calculated	On the Planning List due to: 1. Low dissolved oxygen (1 of 3 samples). 2. High pH (2 of 3 samples). 3. Missing core parameters: <i>Escherichia coli</i> , turbidity, dissolved metals (copper, cadmium, and zinc), and total metals (mercury and lead).			
Cholla Lake 130 acres AZL15020008-0320		A&Ww Inconclusive FC Inconclusive FBC Inconclusive Category 3 — Inconclusive Trophic status – Hypereutrophic	On the Planning List due to 1. Missing core parameters: <i>Escherichia coli</i> , turbidity, dissolved metals (copper, cadmium, and zinc), and total mercury. 2. Fish kill in 2002 was related to resuspension of sediment nutrient loads. This may be evidence of a narrative standards violations.			

TABLE 12. LITTLE COLORADO-SAN JUAN WATERSHED — ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Clear Creek Reservoir 29 acres AZL15020008-0340	A&Wc Inconclusive FC Inconclusive FBC Inconclusive DWS Inconclusive AgL Inconclusive AgL Attaining Category 2 -- Attaining Some Uses Trophic status – Eutrophic	On the Planning List due to: 1. Low dissolved oxygen (1 of 5 samples). 1. <u>Missing core parameters</u> : <i>Escherichia coli</i> , turbidity, dissolved metals (copper, cadmium, and zinc), total fluoride, total boron, and total mercury.		
Kinnikinick Lake 114 acres AZL15020015-0730	A&Wc Inconclusive FC Attaining FBC Inconclusive AgL Attaining Category 2 – Attaining Some Uses Trophic status – Eutrophic	On the Planning List due to: 1. Former turbidity standard exceedances (7 of 7 samples). Causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed. 2. Chronic <u>selenium</u> exceedance (1 of 4 sampling events). 3. <u>Missing core parameters</u> : <i>Escherichia coli</i> and dissolved metals (copper, cadmium, and zinc).		
Lake Mary (lower) 764 acres AZL15020015-0890	A&Wc Inconclusive FC Impaired FBC Inconclusive AgL Inconclusive Category 5 — Impaired Trophic status not calculated	On the Planning List due to insufficient monitoring data (no current water quality monitoring data).	EPA placed this reach on the 2002 303(d) List due to the <u>mercury</u> fish consumption advisory issued in 2002. EPA's listing was based on violation of a narrative standard. Arizona's Impaired Water Identification Rule requires adoption of narrative implementation procedures before the state may use narrative information in a listing decision, but once listed the lake cannot be delisted until a TMDL is complete or sufficient data are collected to indicate that mercury in fish tissue is no longer a concern (e.g., fish consumption advisory is removed). ADEQ is currently collecting fish tissue data and investigating potential mercury sources in support of completing a TMDL.	
Lake Mary (upper) 760 acres AZL15020015-0900	A&Wc Inconclusive FC Impaired FBC Inconclusive DWS Inconclusive AgL Inconclusive Category 5 – Impaired Trophic status – Eutrophic	On the Planning List due to: 1. Insufficient monitoring data to assess (only 1 sampling event). 2. Exceedance of the former <u>turbidity</u> standard (1 out of 1 sampling event). Causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed.	EPA placed this reach on the 2002 303(d) List due to the <u>mercury</u> fish consumption advisory issued in 2002. EPA's listing was based on a narrative standard violation. Arizona's Impaired Water Identification Rule requires adoption of narrative implementation procedures before the state may use narrative information in a listing decision, but once listed the surface water cannot be delisted until a TMDL is complete or sufficient data are collected to indicate that mercury in fish tissue is no longer a concern (e.g., fish consumption advisory is removed). ADEQ is currently collecting fish tissue data and investigating potential mercury sources in support of completing a TMDL.	<u>Mercury</u> does not stay in an aqueous state and bioaccumulates rapidly up the food chain. For this assessment, the lab reporting limits were not low enough to assess chronic mercury standards; therefore, the lack of exceedances in the water column does not provide sufficient information about mercury problems in the lake. Recently ADEQ has applied new "clean sampling" techniques that will provide lower detection limits.
Lee Valley Reservoir 38 acres AZL15020001-0770	A&Wc Inconclusive FC Attaining FBC Inconclusive AgL Attaining AgL Attaining Category 2 — Attaining Some Uses Trophic status – Hypereutrophic	On the Planning List due to <u>missing core parameters</u> : <i>Escherichia coli</i> and dissolved metals (cadmium and copper).		
Long Lake (lower) 323 acres AZL15020008-0820	A&Wc Inconclusive FC Impaired FBC Inconclusive AgL Inconclusive AgL Inconclusive Category 5 – Impaired Trophic status not calculated	On the Planning List due to: 1. <u>Missing core parameters</u> : turbidity, <i>Escherichia coli</i> , total boron, total metals (mercury, manganese, copper, and lead), and dissolved metals (copper, cadmium, and zinc). 2. Insufficient <u>seasonal coverage</u> .	<u>Mercury</u> in fish tissue added to the 2004 303(d) List by EPA. Fish consumption advisory issued in 2003.	

TABLE 12. LITTLE COLORADO-SAN JUAN WATERSHED — ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Lyman Lake 1308 acres AZL15020001-0850	A&Wc Inconclusive FC Impaired FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 5 -- Impaired Trophic status not calculated	On the Planning List due to insufficient water column data to assess (only 1 sample).	Mercury in fish tissue added to the 2004 303(d) List by EPA. Fish consumption advisory issued in 2003.	
McKay Reservoir 12 acres AZL15020001-0007	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 3 -- Inconclusive Trophic status not calculated	On the Planning List. No current monitoring data. Added in 2002 due to: 1. Low <u>dissolved oxygen</u> (1 of 1 sample). 2. High <u>pH</u> (1 of 1 sample). 3. <u>Missing core parameters</u> .		
Nelson Reservoir 67 acres AZL15020001-1000	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 3 -- Inconclusive Trophic status not calculated	On the Planning List due to insufficient monitoring data to assess (only 1 sample).		
Rainbow Lake 111 acres AZL15020005-1170	A&Wc Not attaining FC Inconclusive FBC Not attaining Agl Not attaining AgL Not attaining Category 4A -- Not attaining Trophic status -- Eutrophic	On the Planning List for: 1. TMDL follow-up monitoring (<u>nutrients and pH</u>). 2. Insufficient monitoring.		Nutrient and pH TMDLs were approved by EPA in 2000. Placed on the Planning List in 2002 for follow-up monitoring.
River Reservoir 141 acres AZL15020001-1220	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 3 — Inconclusive Trophic status not calculated	On the Planning List due to missing <u>core parameters</u> : turbidity, <i>Escherichia coli</i> , total boron, total metals (mercury, and lead), and dissolved metals (copper, cadmium, and zinc).		
Soldiers Annex Lake 122 acres AZL15020008-1430	A&Wc Inconclusive FC Impaired FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 5 – Impaired Trophic Status not calculated	On the Planning List due to insufficient water column data (only 1 sample).	Mercury in fish tissue added to the 2004 303(d) List by EPA. Fish consumption advisory issued in 2003.	
Soldiers Lake 28 acres AZ15020008-1440	A&Wc Inconclusive FC Impaired FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 5 – Impaired Trophic Status not calculated	On the Planning List due to insufficient water column data.	Mercury in fish tissue added to the 2004 303(d) List by EPA. Fish consumption advisory issued in 2003.	
Tunnel Reservoir 43 acres AZL15020001-1550	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 3 – Inconclusive Trophic status not calculated	On the Planning List due to: 1. <u>Missing core parameters</u> : <i>Escherichia coli</i> , turbidity, total boron, total metals (mercury, manganese, and lead) and dissolved metals (copper, cadmium, and zinc). 2. Low <u>dissolved oxygen</u> (1 of 3 samples).		

TABLE 12. LITTLE COLORADO-SAN JUAN WATERSHED — ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE				
SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Woods Canyon Lake 70 acres AZL15020010-1700	A&Wc Inconclusive FC Attaining FBC Inconclusive DWS Attaining Agl Attaining Agl Attaining Category 2 — Attaining some uses Trophic status – Eutrophic	On the Planning List due to missing core parameters: <i>Escherichia coli</i> and dissolved metals (cadmium, copper, and zinc).		